

Abstract

Described is a mechano-electrical fuse (10) for a hand grenade (76), which has a spring element for the storage of mechanical energy and which has a drive device connected to the spring element for driving an electrical generator (28) by means of the mechanical energy stored in the spring element. The electrical generator (28) is connected together by way of an electronic delay circuit (56) with a detonator (46), with which a booster charge (48) is associated. A barrier (40) is provided between the detonator (46) and the booster charge (48). The spring element is formed by the tensioning spring (24) associated with the handle lever (18) of the hand grenade (76). The drive device has a taut cable line (68) which is fixed with its one end (70) to the generator shaft (30) and wound with a number of turns (72) around the generator shaft (30). The second end (74) of the cable line (68) is mounted to the handle lever (18). Fixed to the generator shaft (30) is a flywheel mass (32) which is fixed releasably by means of a shearing element (92) in the fuse housing (16) of the mechano-electrical fuse (10).

(Figure 1)

List of references

- 10 mechano-electrical fuse
- 12 housing head (of 16)
- 14 housing sleeve (of 16)
- 16 fuse housing
- 18 lever (of 10)
- 20 lever spindle (for 18)
- 22 safety device (for 16)
- 24 tensioning spring (between 12 and 18)
- 26 first end portion (of 24 at 12)
- 28 electrical generator (in 12)
- 30 generator shaft (of 28)
- 32 flywheel mass (at 30)
- 34 step-down transmission (between 30 and 36)
- 36 barrier displacement shaft (for 40)
- 38 end (of 36 for 40)
- 40 barrier (between 46 and 48)
- 42 barrier disc (of 40)
- 44 barrier disc (of 40)
- 46 detonator (of 10)
- 48 booster charge (of 10)
- 50 compartment (in 52 for 46)
- 52 circuit body (for 56)
- 54 frame (of 52)
- 56 electronic time delay circuit (at 54)
- 58 switching connection (between 56 and 46)
- 60 circuit body (of 56)
- 62 circuit body (of 56)
- 64 through hole (in 42)
- 66 through hole (in 44)
- 68 cable line (between 30 and 18)

70 first end (of 68 on 30)  
72 turns (at 70 on 30)  
74 second end (of 68 at 18)  
76 hand grenade  
78 explosive (of 76)  
80 fragmentation casing (of 76)  
82 lower housing portion (of 76)  
84 upper housing portion (of 76)  
86 central portion (of 84 for 10)  
88 space (in front of 48 in 86)  
90 charge (in 88)  
92 shearing element